

## Wave and Propagation Trainer

Nvis 2000



**Nvis 2000 Wave and Propagation Trainer** is a useful training system for the Laboratories. It helps the student to learn about Wave Properties and Propagation results. Concepts of Reflection, Refraction, Polarization, Diffraction, Interference, Standing waves and Interferometer can be understood very easily. The setup mainly consists of Microwave Transmitter, Microwave Receiver, Goniometer scale. Along with this setup a number of other accessories are provided to perform different experiments. A user friendly manual is provided with this system to help students in perform the experiments and to understand the topic theoretically.

## **Features**

- A Complete set for Transmission, Reception and Measurement of relative strength
- Digital displays are provided for relative strength measurement of microwave
- Complete set of accessories for performing the experiments of Reflection, Refraction, Polarization and Interference etc.
- Audio / Voice communication facility is provided
- Provided with a detector probe for field detection
- Accessories are provided in a carrying case
- Provided with Demo CD
- Online product tutorial

## Scope of learning

- To understand the Basic setup and Introduction to the given system
- To understand the Working of Transmitter and Receiver
- To study the Standing Waves and Measure the Wavelength of Microwave
- To study the Reflection in Microwaves
- To study the Refraction in Microwaves (Snell's Law)
- To study the Polarization in Microwaves
- To study the Fabry-Perot Interferometer
- To study the Voice Communication with the help of Microwave Receiver



## **Technical Specifications**

Frequency of Operation	:	10GHz (approximate)
Power of Transmission	:	10-15mW
Operating Voltage	:	8V (approximate)
Antennas for Transmission & Reception	:	Horntype
Goniometer Scale	:	0° - 360°
Tone Generator	:	1kHz Frequency
Transmitter and Receiver arm length	:	49 cm each (approximate)
Display	:	Digital, Relative
		Measurements
Mains Supply	:	230V ±10%, 50Hz
Include Accessories		
Microwave Transmitter		
Microwave Receiver		
• Transmitter Arm		
Receiver Arm		
Goniometer Base Unit		
Detector Probe		
• Prism		

- Metal Plates of different dimensions
- Partial Reflectors
- DIN Connectors Cables
- Metal Plate holder
- Polarization Grille
- Prism Stand
- Microphone

